

Claim Rejections – 35 U.S.C. § 112

Claim 5 was rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the enabling requirement. Specifically, it was contended that claim 5 required forward and rearward pivots that move along a center axis of the vehicle, and that no details on how this occurs had been described. It was also contended that the drawing figures did not show this feature of claim 5.

Claim 5 requires that the vehicle have a center axis that intersects the forward pivot assembly and the rearward pivot assembly. This feature of the invention is shown in Figures 1 and 3-5, where the center axis 24 intersects the forward pivot assembly 42 and the rearward pivot assembly 72.

Claim 5 further requires that the forward and rearward pivot assemblies move along the center axis when the first and second forward wing sections move between their first and second relative positions. The description of the drawings provided on page 6 of the specification, lines 12-19, describes Figures 1 and 3-5 as illustrating the relative positions of the wing sections as the wing sections move from their first relative positions to their second relative positions. Thus, in the description of the drawings alone, the specification provides support for the subject matter of claim 5.

Furthermore, on viewing figures 1 and 3-5, it can be seen that the pivot assemblies 42, 72 are spaced a first distance from each other in Figure 1, and are spaced at different distances from each other in Figures 3, 4, and 5. The pivot assemblies 42, 72 move away from each other along the vehicle center axis 24 as the vehicle wing sections move from their first relative positions shown in Figure 1, to their

second relative positions shown in Figure 5. Thus, the drawing figures also provide support for the subject matter of claim 5.

Furthermore, the specification describes the actuation of the four pivot assemblies 42, 72, 82, 84 to achieve the first configuration of the aircraft shown in Figure 1. Page 12, lines 18-21 sets forth that the pivot assemblies are actuated "to cause the forward pivot assembly (42) and rearward pivot assembly (72) to move toward each other along the aircraft center axis (24) to their closest relative positions shown in Figure 1." Thus, the specification does provide support for the subject matter of claim 5. Still further, the specification on page 13, lines 19-23, further describes the four pivot assemblies 42, 72, 82, 84 being actuated to cause "the forward pivot assembly (42) and the rearward pivot assembly (72) to move away from each other along the longitudinal center axis (24) of the aircraft." Thus, the specification provides ample support for the subject matter of claim 5.

In view of all of the above, it is submitted that the specification and drawings provide ample support for the subject matter of claim 5, and the rejection of claim 5 as containing subject matter that is not described in the specification is made in error and should be withdrawn.

Drawings

The drawings were objected to for failing to show the movement of the pivot points along the center axis as recited in claim 5. As explained above, Figures 1 and 3-5 illustrate the movements of the pivot assemblies 42, 72 along the aircraft center axis 24. Because the drawings do disclose the subject matter of claim 5, the rejection of the claim is made in error and should be withdrawn.

Claim Rejections – 35 U.S.C. § 102

Claims 1-33 were rejected under 35 U.S.C. §102(b) as being clearly anticipated by the disclosure of the International Patent Publication WO 96/36533. It is submitted that the publication does not identically disclose every feature of the invention recited in the claims, and therefore does not anticipate the claims.

For a prior-art reference to anticipate, every element of the claimed invention must be identically shown in a single reference.

In Re Bond, 910 F.2d 831, 15 U.S.P.Q. 2d 1566 (Fed. Cir. 1990).

Under the above-cited case law, for the international publication to anticipate the subject matter of the rejected claims, every element of the claimed invention must be identically shown in the reference. The reference fails this requirement, and therefore does not anticipate claims 1-33.

Claim 1, in addition to other novel features of the invention, recites the left side forward wing section being connected to the left side rearward wing section and the right side forward wing section being connected to the right side rearward wing section with there being an opening between the left side and right side forward wing sections and the left side and right side rearward wing sections, "with no other portion of the aerodynamic body being positioned in the opening." This quoted subject matter from claim 1 is not identically disclosed by the international publication, and therefore the publication does not anticipate claim 1.

The abstract of the publication sets forth that the air frame "has a longitudinal beam (6) and a front pair and rear pair (7 and 8 respectively) of opposing lateral beams." The drawing figures of the publication show the longitudinal beam 6 extending

through the opening between the front pair 7 of lateral beams and the rear pair 8 of lateral beams. Thus, the longitudinal beam 6 is positioned in the opening between the front lifting surface (4) of the wing and the rear lifting surface (5) of the wing. The reference fails to disclose the requirements of claim 1, specifically “no other portion of the aerodynamic body being positioned in the opening.” Because the publication does not disclose every element of the claimed invention, it does not anticipate claim 1, and does not anticipate claims 2-13 that all depend from claim 1.

In a manner similar to claim 1, independent claim 24 requires a forward wing having a leading edge defining a forward end of the vehicle, a rearward wing having a trailing edge defining a rearward end of the vehicle, the forward wing being connected to the rearward wing, and an opening between the forward wing and the rearward wing “with there being no other portion of the aircraft in the opening.” Again, the patent publication discloses a longitudinal beam 6 in the opening between the forward wings 4 and the rearward wing 5. Because the patent publication fails to identically disclose “there being no other portion of the aircraft in the opening” as required by claim 24, the publication fails to anticipate claim 24, and fails to anticipate claims 25-33 that all depend from claim 24.

Independent claim 14 recites an aerodynamic vehicle “consisting essentially of” a left side forward wing section, a right side forward wing section connected to the left side forward wing section for moving between first and second relative positions of the wing sections, a left side rearward wing section, a right side rearward wing section connected to the left side rearward wing section for relative movement between first and second relative positions of the rearward wing sections, and the left side forward and

rearward wing sections being connected together for relative movement, and the right side forward and rearward wing sections being connected together for relative movement. Because the claim language preamble includes the phrase “consisting essentially of,” the counts of the claim describe the essential features of the invention. These do not include a longitudinal beam that extends between the forward wing sections and the rearward wing sections as disclosed by the prior art publication relied on in rejecting claim 14. Because the publication includes the additional longitudinal beam 6, the publication does not identically disclose the subject matter of the invention recited in claim 14, and does not anticipate claim 14 or its dependent claims 15-23.

Therefore, for all of the reasons set forth above, the patent publication WO 96/36533 does not anticipate the subject matter of the invention recited in claims 1-33.

Claim Rejections – 35 U.S.C. § 102

Claims 1-9, 11-19, and 21-23 were rejected under 35 U.S.C. § 102(b) as being anticipated by the U.S. Patent of Garrett No. 5,899,410. For the same reasons discussed above with regard to the International Patent Publication WO 96/36533, the Garrett reference also fails to anticipate the subject matter of the rejected claims in that it does not identically disclose all of the features of the invention set forth in the independent claims.

In the rejection of the claims, the rejection refers to the opening between the forward wing section 14 and rearward wing section 16 on the left side of the aircraft. However, the claims of the invention require an opening between left and right forward wing sections and left and right rearward wing sections. The Examiner’s explanation of the rejection only looks at an opening between a left side forward wing section and a left

side rearward wing section. Thus, the Examiner's explanation of what the Garrett reference discloses has nothing to do with the subject matter of the invention recited in the rejected claims. The rejection is based on only one half of the aircraft disclosed in Garrett.

The claims are directed to an opening between left and right forward wing sections and left and right rearward wing sections. The claims are not directed to an opening between a left forward wing section and a left rearward wing section as in the Examiner's explanation. The entire Garrett reference disclosure does not identically disclose the subject matter of the invention recited in the rejected claims, and therefore the Garrett reference fails to anticipate the subject matter of the rejected claims.

For the same reasons set forth above with regard to the International Patent Publication WO 96/36533, the Garrett reference also fails to identically disclose each of the claimed features of the invention as required by the above-cited case law, and therefore the Garrett reference fails to anticipate the subject matter of the rejected claims.

Claim Rejections – 35 U.S.C. § 103

Claims 10 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of the Garrett reference. In the rejection of the claims, it was explained that although the Garrett reference did not disclose the subject matter of claims 10 and 20, that the subject matter of the claims "whatever that may be" would be obvious in view of the reference.

It is submitted that the rejection of claims 10 and 20 fails to establish a prima facie case of obviousness in failing to identify any suggestion or motivation of the

subject matter of the rejected claims in the prior art reference relied on in rejecting the claims. Because the prior art provides no suggestion of the claimed subject matter, claims 10 and 20 are allowable over the prior art.

Furthermore, claim 10 depends from claim 1 and claim 20 depends from claim 14. As explained above with regard to these independent claims, the Garrett reference fails to disclose or suggest the subject matter of the invention recited in the independent claims 1 and 14. For this additional reason, it is submitted that claims 10 and 20 are allowable over the prior art.

It is respectfully submitted that in view of the remarks presented herein, the application is in condition for allowance. It is also submitted that applicant's attorney requests a telephone interview in this application to ensure that the next Office Action is a notice of allowance.

Respectfully submitted,

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